

User Manual

The Motorola Netopia® 2247-N8
DSL Gateway

4-port Ethernet, 802.11b/g/n Wi-Fi



Safety Information

IMPORTANT SAFETY INSTRUCTIONS – POWER SUPPLY INSTALLATION. Connect the power supply cord to the power jack on the Motorola Gateway. Plug the power supply into an appropriate electrical outlet.

CAUTION: Depending on the power supply provided with the product, either the direct plug-in power supply blades, power supply cord plug or the appliance coupler serves as the mains power disconnect. It is important that the direct plug-in power supply, socket-outlet or appliance coupler be located so it is readily accessible.

(Sweden) Apparaten skall anslutas till jordat uttag när den ansluts till ett nätverk

(Norway) Apparatet må kun tilkoples jordet stikkontakt.

TELECOMMUNICATION INSTALLATION. When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electrical shock from lightning.
- Do not use the telephone to report a gas leak in the vicinity of the leak.

PRODUCT VENTILATION. The Motorola Gateway is intended for use in a consumer's home. Ambient temperatures around this product should not exceed 104°F (40°C). It should not be used in locations exposed to outside heat radiation or trapping of its own heat. The product should have at least one inch of clearance on all sides except the bottom when properly installed and should not be placed inside tightly enclosed spaces unless proper ventilation is provided.

SAVE THESE INSTRUCTIONS

Motorola Part Number: 579442-001-00

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1 Checklist

Thank you for selecting the Motorola Netopia® 2247-N8 DSL Gateway. This guide will help you set up and configure your network.

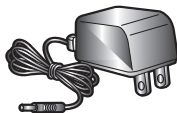
Check your package contents. It should contain the items shown here:



Motorola Gateway



CD & User Manual



Power Supply



Telephone Cable



Ethernet Cable

If you don't have everything, contact your supplier immediately.

2 Connections

1. Decide on a location for the Gateway.

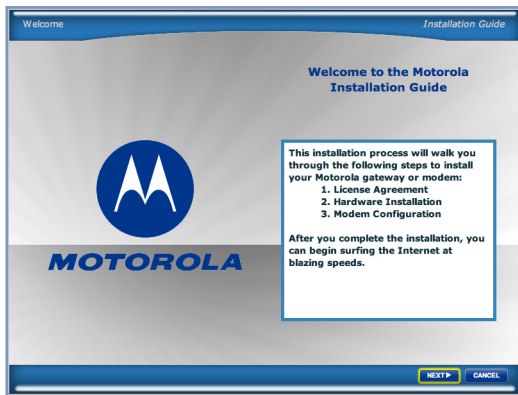
Put the Gateway near a power source, a DSL wall outlet, and in a location where air can circulate freely around it.

2. Power the Gateway.

Connect the power supply to the power jack on the back panel of the Gateway. Then, plug the power supply into an electrical outlet. Turn on the Power switch.

The **Power** LED should light solid green.

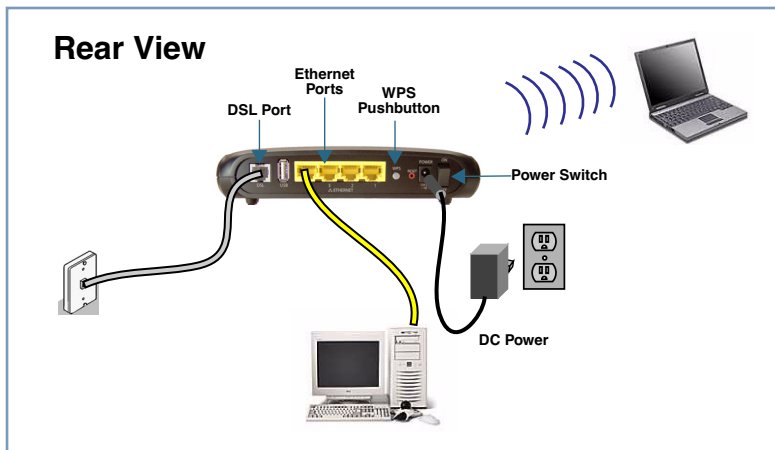
3. Insert the Motorola Netopia® CD into your CDROM drive.



The Motorola Netopia® Installation Guide Wizard automates several tasks to get you up and running easily. These tasks include making the cable connections and configuring the Gateway. Run the Wizard on every PC that will connect to your network.

The Installation Guide Wizard will start automatically and the Welcome screen will appear to step through the process. Follow the on-screen instructions to make all of your connections.

When all of your connections are made, your network may look like this:



4. Enable Wireless Protected Setup (WPS) on your Wi-Fi devices.

Adding wireless clients to your network is easier using Wireless Protected Setup (WPS). Older, non-WPS clients can still be added to the network by configuring them the standard way with WPA-PSK.

Make sure your wireless clients are running. Press the WPS push-button to begin the exchange, which may last up to two minutes.

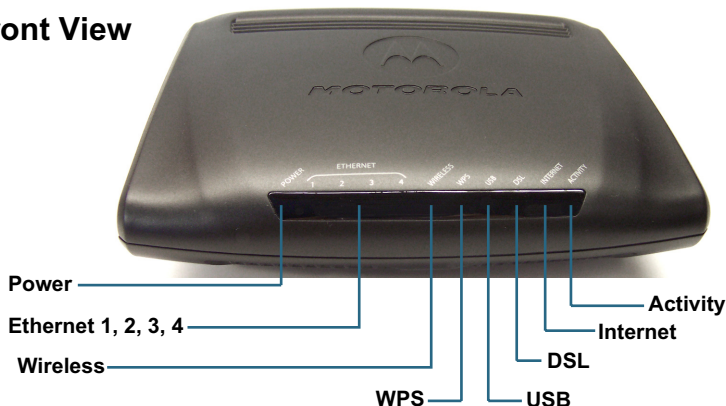
Do not power off your Gateway during the exchange.

The Gateway will display a success message when the exchange has completed.

Note: Not all client wireless devices support WPS. Refer to their documentation.

When all of your connections are made, the status LEDs on the front of your Motorola IAD Gateway will light, according to the following diagram:

Front View



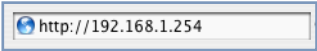
LED	Behavior
Power	Green when power is on. Red if device malfunctions; flashes red when updating embedded software.
Ethernet 1, 2, 3, 4	Solid green when connected. Flash green when there is activity on the LAN.
Wireless	Flashes green when there is activity on the wireless LAN.

LED	Behavior
WPS	Solid green when WPS is successful.
USB	Not currently used.
DSL	Flashes green when training. Solid green when trained.
Internet	Green when device is connected. Flashes green for activity on WAN port.
Activity	Off = The device is not powered or the broadband connection is not present; Flashing green = Inbound Internet activity seen from the broadband connection

3 Device Configuration

You can access the configuration pages at any time as follows:

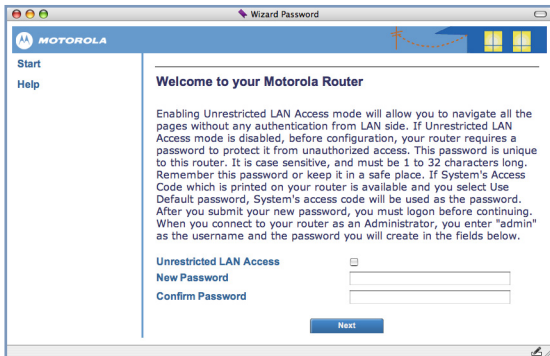
1. Run a Web browser, such as Firefox, Safari, or Microsoft Internet Explorer, and enter **<http://192.168.1.254>** in the URL Address text box.



Press Return.

(If your ISP's Configuration Worksheet tells you to use an IP address other than 192.168.1.254 to log in, enter `http://< ip-address>.`)

2. The browser displays the Welcome page.



- You can choose **Unrestricted LAN Access**.

If you choose Unrestricted LAN Access, any user connected to your network can access and administer the Motorola Netopia® Gateway's configuration pages.

Or,

- For security, you may create and enter an Administrative password for accessing the Motorola Netopia® Gateway.

- The administrative User name is **admin**.

- The initial Password can be whatever you choose, from one to 32 characters long.

This user name and password are separate from the user name and password you might use to access the Internet. You may change them later. You will be challenged for this Admin username and password any time that you attempt to access the Motorola Netopia® Gateway's configuration pages.

If you have chosen to create an Administrative password, when you connect to your Gateway as an Administrator, you enter "**admin**" as the UserName and the Password you just created.

Record your subscriber information here for future reference:

Required Information	Your entries:
Your Telephone number:	
Your ISP Username:	(example: joesurfer@serviceprovider.com)
Your ISP Password:	
Service Provider support contact information:	Support desk number -

Congratulations! Your connection is up and running and you should be able to browse the Internet by typing a URL address in your browser's Address text box or by selecting any of your favorite bookmarks.

Should you require additional information, the ["FAQs" on page 14](#) of this Guide contain Frequently Asked Questions (and Answers) and ["Basic Troubleshooting" on page 16](#) gives Basic Troubleshooting tips. The latest Administrator's Handbook with advanced configuration instructions is also available on-line at:

<http://broadband.motorola.com/consumers/support/default.asp?supportSection=blank>

Client Configuration

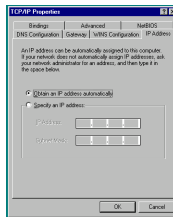
Your Gateway serves Dynamically-assigned IP addresses by default. Be sure to configure each computer connected to your Gateway to accept a Dynamically-assigned IP address, commonly referred to as DHCP.

Microsoft Windows:

Step 1. Navigate to the TCP/IP Properties Control Panel.

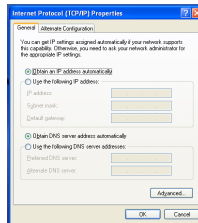
a. Windows 98, 2000, and ME versions follow a path like this:

Start menu -> Settings -> Control Panel -> Network (or Network and Dial-up Connections -> Local Area Connection -> Properties) -> TCP/IP [your_network_card] or Internet Protocol [TCP/IP] -> Properties



b. Windows XP follows a path like this:

Start menu -> Control Panel -> Network and Internet Connections -> Network Connections -> Local Area Connection -> Properties -> Internet Protocol [TCP/IP] -> Properties



Step 2. Select Obtain an IP address automatically.

Step 3. Select Obtain DNS server address automatically, if available.

Step 4. Remove any previously configured Gateways, if available.

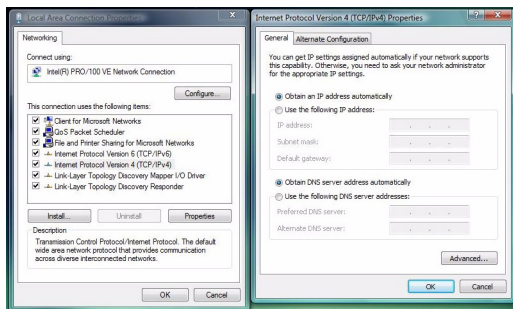
Step 5. OK the settings. Restart if prompted.

c. Windows Vista is set to obtain an IP address automatically by default. You may not need to configure it at all.

To check, open the **Networking** Control Panel and select **Internet Protocol Version 4 (TCP/IPv4)**. Click the **Properties** button.

The **Internet Protocol Version 4 (TCP/IPv4) Properties** window should appear as shown.

If not, select the radio buttons shown above, and click the **OK** button.

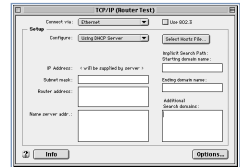


Macintosh Mac OS 9 or Mac OS X:

Step 1. Access the TCP/IP or Network control panel.

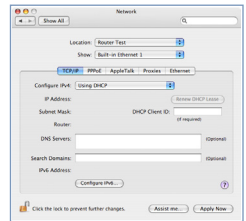
a. Mac OS 9 follows a path like this:

Apple Menu -> Control Panels -> TCP/IP Control Panel



b. Mac OS X follows a path like this:

Apple Menu -> System Preferences -> Network



Step 2. Select Built-in Ethernet

Step 3. Select Configure Using DHCP

Step 4. Close and Save, if prompted.

ENGLISH

FAQs

Q: Why is my DSL light flashing green?

A: A flashing green light indicates that no cable is attached to the DSL port or that the Motorola Netopia® Gateway is negotiating a connection. A solid green DSL light indicates that an internet connection is established.

If your DSL light does not become solid green, verify that the connection from the Motorola Netopia® Gateway's DSL port to the telephone/DSL jack is secure. If the connection is secure, contact your ISP (Internet Service Provider) to verify that your DSL line is functioning properly.

Q: I forgot my password, how can I access my Motorola Netopia® Gateway?

A: If you don't have a password, the only way to access the Motorola Gateway is the following:

Referring to the following diagram, find the round Reset Switch opening.



Factory Reset Switch

Carefully insert the point of a pen or an unwound paperclip into the opening.

- If you press the factory default button for less than 1/2 a second, the unit will continue to run as normal.
- If you press the factory default button for

more than 15 seconds, when you release it, the Gateway will perform a factory reset, clear all settings and configurations, and reboot.

Note: To assure the Motorola Netopia® Gateway factory defaults you *MUST* hold the reset switch for more than 15 seconds. When you release it, the Gateway will perform a factory reset, clear all setting and configurations, and reboot. Keep in mind that all of your settings will need to be reconfigured.

Q: What is the default IP address of my Motorola Netopia® Gateway?

A: The default IP address of the Motorola Netopia® Gateway is 192.168.1.254. You may access the WebUI configuration pages by typing <http://192.168.1.254> URL into your browser.

Q: I made some configuration changes in my Motorola Netopia® Gateway and the changes have not taken effect.

A: Any configuration changes made to the Motorola Netopia® Gateway require a save and restart before they take effect.

Q: How do I access the configuration screens of my Motorola Netopia® Gateway?

A: You may access your Motorola Netopia® Gateway by typing the following into your web browser [*http://192.168.1.254*](http://192.168.1.254).

Note: By default, your Motorola Netopia® Gateway has an Ethernet IP Address of **192.168.1.254**.

Q: What is the default user name and password of the Motorola Netopia® Gateway?

A: Motorola Netopia® Gateways are not distributed with a default password. Upon initial configuration, the Gateway requires a new password to be set.

Basic Troubleshooting

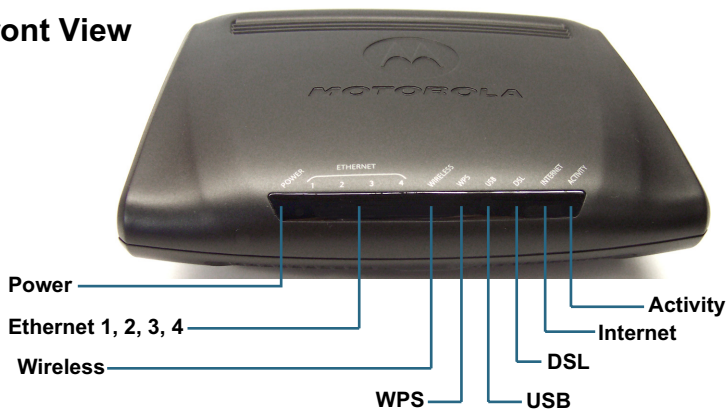
This section gives some simple suggestions for troubleshooting problems with your Gateway's initial configuration.

Before troubleshooting, make sure you have

- plugged in all the necessary cables (see [“Connections” on page 4](#)); and
- set your PC's TCP/IP controls to obtain an IP address automatically (see [“Client Configuration” on page 11](#)).

The first step in troubleshooting is to check the status indicator lights (LEDs) in the order outlined below.

Front View



LED Function Summary

	Power	DSL	Internet
<i>Unlit</i>	No power	No signal	Not connected
<i>Solid Green</i>	Power on	DSL line synched with the DSLAM	Connected to the Internet
<i>Flashing Green</i>	N/A	Activity on the DSL cable	Transmitting or receiving data on the WAN port
<i>Solid Red</i>	System malfunction	N/A	N/A
<i>Flashing Red</i>	Updating embedded software	N/A	N/A

	Ethernet 1, 2, 3, 4	WPS	Wireless
<i>Unlit</i>	No signal	No wireless signal	No wireless signal
<i>Solid Green</i>	Synched with Ethernet card	WPS exchange with client is successful	N/A
<i>Flashing Green</i>	Activity on the Ethernet cable	N/A	Activity on the wireless LAN
<i>Solid Red</i>	N/A	N/A	N/A
<i>Flashing Red</i>	N/A	N/A	N/A

If a status indicator light does not look correct, look for these possible problems:

If LED is not Lit	Possible problems
Power	• Make sure the power switch is in the ON position. • Make sure the power adapter is plugged into the DSL Gateway properly. • Try a known good wall outlet. • Replace the power supply and/or unit.
DSL	• Make sure that any telephone has a microfilter installed. • Make sure that you are using the correct cable. The DSL cable is the thinner standard telephone cable. • Make sure the DSL cable is plugged into the correct wall jack. • Make sure the DSL cable is plugged into the DSL port on the DSL Gateway. • Make sure the DSL line has been activated at the central office DSLAM. • Make sure the DSL Gateway is not plugged into a micro filter.

**Ethernet
1,2,3,4**

- Make sure you are using the Ethernet cable, not the DSL cable. The Ethernet cable is thicker than the standard telephone cable.
- Make sure the Ethernet cable is securely plugged into the Ethernet jack on the PC.
- Make sure the Ethernet cable is securely plugged into the Ethernet port on the DSL Gateway.
- Try another Ethernet cable if you have one available.
- Make sure you have Ethernet drivers installed on the PC.
- Make sure the PC's TCP/IP Properties for the Ethernet Network Control Panel is set to obtain an IP address via DHCP.
- Make sure the PC has obtained an address in the 192.168.1.x range. (You may have changed the subnet addressing.)
- Make sure the PC is configured to access the Internet over a LAN.
- Disable any installed network devices (Ethernet, HomePNA, wireless) that are not being used to connect to the DSL Gateway.

Support

Answers to many frequently asked product-related questions, as well as full product documentation with advanced configuration instructions, are also available on-line at:

<http://broadband.motorola.com/consumers/support/default.asp?supportSection=blank>

Note the serial number (**SN**;) of your Gateway. It is located on the label on the bottom of the Gateway below the model number. You will need the Gateway's serial number if you need to call for technical support.

Recycling your Motorola Equipment

When you see this symbol on a Motorola product, do not dispose of the product with residential or commercial waste.



Please do not dispose of this product with your residential or commercial waste. Some countries or regions, such as the European Union, have set up systems to collect and recycle electrical and electronic waste items. Contact your local authorities for information about practices established for your region.

If collection systems are not

available, call Motorola Customer Service for assistance. For instructions on recycling please visit: <http://www.motorola.com/recycle>

Umweltschutz durch Recycling

Wenn Sie dieses Zeichen auf einem Produkt von Motorola sehen, entsorgen Sie das Produkt bitte nicht als gewöhnlichen Hausoder Büromüll.

Recycling bei Geräten von Motorola

Bitte entsorgen Sie dieses Produkt nicht als gewöhnlichen Haus- oder Büromüll. In einigen Ländern und Gebieten, z. B. in der Europäischen Union, wurden Systeme für die Rücknahme und Wiederverwertung von Elektroschrott eingeführt. Erkundigen Sie sich bitte bei Ihrer Stadtoder Kreisverwaltung nach der geltenden Entsorgungspraxis. Falls bei Ihnen noch kein Abfuhroder Rücknahmesystem besteht, wenden Sie sich bitte an den Kundendienst von Motorola.

Recyclage pour le respect de l'environnement

Lorsque vous voyez ce symbole sur un produit Motorola, ne le jetez pas avec vos ordures ménagères ou vos rebuts d'entreprise.

Recyclage de votre équipement Motorola

Veuillez ne pas jeter ce produit avec vos ordures ménagères ou vos rebuts d'entreprise. Certains pays ou certaines régions comme l'Union Européenne ont mis en place des systèmes de collecte et de recyclage des produits électriques et électroniques mis au rebut. Veuillez contacter vos autorités locales pour vous informer des pratiques instaurées dans votre région. Si aucun système de collecte n'est disponible, veuillez appeler le Service clientèle de Motorola qui vous apportera son assistance.

